DOCUMENT RESUME

ED 175 211 EC 120 164

AUTHOR Parmenter, Trevor R.
TITLE Factors Influencing the Development of Special Education Facilities in Australia for Children with Learning Disabilities/Learning Difficulties.
INSTITUTION Macquarie Univ., North Ryde (Australia). School of Education.
PUB DATE Feb 79
NOTE 21p.: Paper presented at the International Conference of Association for Children with Learning Disabilities (San Francisco, California, February, 1979)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Educational History: Educational Philosophy: Educational Research: *Educational Trends: Elementary Secondary Education: *Foreign Countries: *Learning Disabilities: *Program Development
IDENTIFIERS *Australia

ABSTRACT

The effects that historical, philosophical, and empirical factors have had upon the development of special education in Australia for children with learning disabilities are examined. It is suggested that, owing to the early neglect by the various education departments in providing effective services, there has been a resultant dearth of professionally competent personnel to implement policies being formulated upon the emerging philosophies in special education. It is therefore argued that Australia requires an effective thrust into research at the classroom, the delivery, and the teacher preparation levels so that the relatively diminishing resources for education may be better utilized for the child with a learning problem. (Author/SBH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED175211

MACQUARIE UNIVERSITY

SCHOOL OF EDUCATION

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Factors Influencing the Development of Special Education Facilities in Australia for Children with Learning Disabilities/Learning Difficulties

Trevor R. Parmenter

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Trevor R. Parmenter

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EC120164

Factors Influencing the Development of Special Education Facilities in Australia for Children with Learning Disabilities/Learning Difficulties[1]

Trevor R. Parmenter[2]

[1]Paper presented at International Conference of Association for Children with Learning Disabilities, San Francisco, February, 1979.

[2]Lecturer in Special Education, Macquarie University, Sydney, N.S.W.,Australia. Formerly a teacher of special classes and principal of a special school with the N.S.W. Department of Education.

ABSTRACT

The effects that historical, philosophical and empirical factors have had upon the development of special education in Australia for children with learning disabilities/difficulties are examined. It is suggested that owing to the early neglect by the various education departments in providing effective services there has been a resultant dearth of professionally competent personnel to implement policies being formulated upon the emerging philosophies in special education. It is therefore argued that Australia requires an effective thrust into research at the classroom, the delivery and the teacher preparation levels so that the relatively diminishing resources for education may be better utilized for the child with a learning problem.

Factors Influencing the Development of Special Education Facilities in Australia for Children With Learning Disabilities/Learning Difficulties

> *It is our concern, however, based on the evidence we have examined, that students, not a large proportion but nevertheless a significant number, are being denied the opportunity to learn to read, to write and to calculate confidently and accurately, by a failure on the part of the schools and on the part of Australian society which must make the necessary provision for education in its schools.*
>
> Australian Studies in School Performance, 1977.

The purpose of this paper is to trace the developments of educational facilities in Australia for children with learning disabilities/difficulties and to examine current practices. The paper will be organized into three sections covering historical, philosophical and empirical factors which, it is suggested, have influenced these developments.

HISTORICAL FACTORS

Development of Public School System

To appreciate more fully the development and delivery of services for children with learning disabilities/learning difficulties (the definitions of which will be dealt with later) in Australia, it is necessary to be aware of the geographical and socio-political conditions which have moulded the general education system. First, Australia is a large, sparsely populated continent where state governments have had to contend with vast distances in providing educational services to all children. Since the late nineteenth century all state governments have provided free, secular and compulsory education for most children with the exception of those who were severely intellectually or physically handicapped. These services were organized by a strong, centralized bureaucracy administered by a minister responsible to the state parliament. Unlike the U.S. or Britain, local government bodies have had little, if any,say in the conduct or administration of education services.

Secondly, an over riding feature inherent in educational planning and the distribution of resources was the principle of equality of opportunity so that, on paper at least, a child in an isolated community had

the same share of resources as the one in a more populated region.

The Private School

After state governments assumed the major responsibility for the provision of educational facilities, independent schools, conducted principally by religious groups, continued to flourish and currently cater for 20-25% of children. In recent years there has been an increasing amount of government financial assistance to the private sector; a practice not without its detractors.

Legislation

Owing to Australia's colonial background all governments have adopted the Westminister parliamentary system which provides a very different legislative framework than, for instance, the U.S. system. Consequently there is not the same sort of constitutional basis which underpins the due process provisions in the Education of All Handicapped Children Act (PL 94-142). Indeed, legislation under which most state governments conduct their school systems gives little opportunity for parents or others to question, in a legal sense, provisions or standards that obtain in their schools.

Unfortunately, brief mention is made of handicapped children in most state Education Acts, although as late as 1976 the Western Australian Education Act contained a clause which discriminated against the blind, deaf, mute, cerebrally palsied or mentally defective child by asserting that their education was the responsibility of the parent. On the other hand the Victorian Education (Handicapped Children) Act of 1973 is possibly the most significant recognition, in a legislative sense, of the needs of the handicapped student in Australia. In addition that state is unique in having Australia's only Minister for Special Education.

Effects of Centralized Control

Owing to the highly centralized bureaucracies which conducted the education systems, the relatively low level of teacher training and the

concern for standards of teacher behaviour, there developed a rigid inspectorial system which, while having some advantages, nevertheless tended to create generations of teachers and school principals who were fearful of making independent and innovative decisions. This period was also characterized by a disciplined adherence to fixed curricula and timetables. Now, while the educational climate has changed quite considerably in recent years, there is still a legacy of insecurity and a lack of true professionalism among many in the teaching fraternity. This earlier climate affected, too, the relationships between parents and their schools so that communities are only just realising that they have an inalienable right and duty to become involved in the decision making processes in schools. Many teachers, unfortunately, still view this proposition as an intrusion into their professional responsibilities, but it is suggested that this possibly highlights their professional insecurity. Currently, however, an encouraging feature of the Australian education scene is the process of devolution of decision making towards the school level which has accompanied a regionalization of the administrative structures. Hopefully these developments will first bring schools closer to their communities and secondly, will stimulate a genuine team approach to educational problems within individual schools.

Effects of Taxation System

Another very significant influence upon the growth of special education services, indeed all education services, is the federal system of taxation. During World War II the states surrendered their individual income taxation rights to the federal government which in turn reimbursed them according to a complex formula. In addition, the federal government periodically makes grants to the states for specific projects. For example, in the 1960's it made direct grants to the states for the upgrading of science teaching facilities in high schools. It also assumed a major interest in the funding of tertiary education facilities such as universities and colleges. Special funding for high school libraries followed, together with the principle of federal assistance to independent schools. With a rapidly increasing post-war birth rate accompanied by an expanding immigration program, states were hard pressed simply to keep pace with classroom accommodation and associated physical requirements.

It is not surprising therefore that calls to the federal government for an increased concern for children having learning difficulties went unheeded, while all governments were more politically sensitive to the quantity rather than the quality of educational services. The price the system was to pay for this desultory approach to children with special needs was immense, for neither was the current generation being assisted and nor were professionals being trained to handle the problems of future generations of at risk children. Indeed, the major thesis of this paper is that owing to the early neglect and derelection in its responsibilities to children with special needs, Australia has failed to produce both the dynamic leadership and the professionally competent teachers necessary to form a nucleus around which the current philosophies of normalization, integration and mainstreaming may be effected satisfactorily and realistically.

Growth of Special Services

The development of special provisions for the various categories of handicapped children during the first half of this century paralleled overseas developments. Characteristically children with special problems were directed into institutions, special schools or special classes. Quite often many were left to the care of their parents or charitable agencies. Of course in the earlier, less urbanized and industrialized society it was traditional and quite acceptable for those who found the regular school program too difficult to drop out at an early age. While a separate category for children with learning disabilities, to use the commonly accepted U.S. terminology, was not officially established, children who were deemed to be having literacy or numeracy difficulties and who also appeared to be of at least average ability, were provided in some cases with additional help, usually by partial withdrawal to a remedial teacher. In too many cases this teacher had little additional professional preparation beyond basic teacher training. In most cases, too, the busy class teacher took little active interest in the program being conducted by the "specialist" teacher. Unfortunately the remedial program in many cases was a repeat performance of what the student had already failed at, and it is therefore not surprising that there is not much evidence to support the long term effects of remedial teaching.

In this respect it is quite surprising that Sir Fred Schonell, who dominated the Australian Special Education in the 1950's when he was Professor of Education at the University of Queensland and who had earlier made such a significant impact upon the remedial education movement in Britain, did not have a similar and long lasting effect in his native country at a national level. Together with his wife, Eleanor, who had a special interest in spasticity, Schonell saw the importance of the teacher as the primary intervention agent for children with learning difficulties. With his colleagues in the Remedial Education Centre, which he established, Schonell trained large numbers of teachers from many parts of Australia in the basics of educational psychology and remedial teaching. Two factors may have contributed to the apparent short term effects of their work. First, Schonell's remedial model of comparing a child's achievement with his potential has proved to be basically invalid on psychometric and educational grounds. Secondly, as has been pointed out, Australia lacked at both the state and national levels an articulated commitment to the education of disadvantaged groups and hence, in a sense, Schonell was a prophet preaching in an institutional wilderness.

That notwithstanding, Schonell's work, as epitomized in his classic Backwardness in the Basic Subjects, remains a unique example of the pragmatic approach to learning difficulties which has not, in many respects, been surpassed by more recent approaches. Perhaps an additional factor contributing to its lack of wide and lasting acceptance in the special education world was the emerging guidance model which sought to classify children on more psychological bases which possibly seduced teachers into searching for more alluring models of remediation.

For instance, in some small states small numbers of special classes were formed for children who were diagnosed as having language problems or perceptual difficulties. Here again we find an organizational solution to what is first an instructional

problem. For example, in N.S.W. teachers appointed to these classes had no special training, but neither did those appointed to any special class, with the possible exception of the deaf! Parents and lobby groups who had been traditionally excluded from the classroom glibly accepted these administrative adjustments as evidence of the government's concern for their children, but little thought was given to either the quality of the educational process or the quality of the outputs in the form of improved pupil achievement and satisfaction. For many parents these classes were the beginning of a tragic merry-go-round from agency to agency in a fruitless search for an effective program.

Lobby Groups

Lobby groups for specific categories of handicapped children, with the possible exception of those associated with the physically handicapped who have been supported by financially strong charity groups from the upper class establishment, have been only moderately effective in directly affecting educational policies and planning in Australia. However, bodies such as SPELD and ACLD have succeeded in heightening the community's awareness of problem areas, particularly by their practice of mounting conferences in which internationally recognized speakers have participated.

PHILOSOPHICAL FACTORS

Establishment of a Schools Commission

Undoubtedly, overseas philosophies and practices have had a profound effect upon parents, administrators and teachers. This contributed to an intensification of the pressure upon the federal government for direct assistance to disadvantaged groups of children. With a change in the federal government in 1972 and the subsequent establishment of an Interim Committee for the Australian Schools Commission, the scene was set for direct federal finance for handicapped children. In addition the Interim Committee's Report (Karmel, 1973) and subsequent Schools Commission Reports, espoused the philosophies of normalization, integration and mainstreaming of handicapped children. Quite bravely, they also asserted that all children should be educated to a minimal educational level. Another theme which is finding increasing acceptance in the Australian scene is the decategorization of the handicapped child, a principle which seems consonant with the integration/mainstreaming philosophy. Interestingly, these philosophies at present lack an empirical basis; somewhat in the same way as did the earlier practices. Unfortunately little local research had been conducted, either into more adequate teaching procedures or the question of the appropriateness of the

various delivery models. In essence, administrators were attempting to translate overseas philosophies and models into the Australian scene; a practice which later research has questioned (Watts et al, 19780).

In the Special Education area the immediate effect of the Karmel Report (1973) was a burgeoning of teacher training facilities, an accelerated building program and the absorption of privately conducted establishments for groups formerly denied public schooling. As predicted, the rapid expansion of tertiary training courses exposed the shortcomings of the earlier policies for there was an immediate dearth of adequately trained professionals in special education to assume the leadership roles. The administrators, too, were often insufficient to the cause, lacking in many cases the vision, the energy and the courage to pursue the challenges which the new philosophies were posing.

Select Parliamentary Committee on Specific Learning Difficulties

Evidence of the growing public concern for the needs of children with learning difficulties was also demonstrated by the federal government's appointment in 1974 of a Select Committee to investigate learning difficulties in children and adults across Australia. While the committee's report (Cadman, 1976) has been heralded as one of the significant milestones in the special education scene in Australia, disappointment has already been expressed at the way teacher education institutions have received its recommendations (Keeves et al, 1978). It is doubtful, too, if many teachers or administrators of the general education system are conscious of the implications of the report's findings and recommendations. For instance, a major survey of N.S.W. school principals' attitudes toward the policy of the integration of handicapped children into regular schools (Ward et al, 1978) revealed a marked heterogeneity of views concerning both the policy and the way it might be best implemented. Not surprisingly, this study exposed quite dramatically the need for a re-education of the general school system in its attitudes toward special groups and it is in this context that the true professionalism of the teachers may be questioned.

Definition of the Population

The Committee spent some time exploring definitions of the population to be studied and ultimately suggested that,

> *It is questionable whether placement, treatment and funding for children with special needs are really dependent on a definition, particularly as no general acceptable definition exists .... There has been a lack of reliable evidence that justifiably ties a particular treatment to a particular group, or conclusively determines the validity of placement of children to one classification category.*
> *(p.11)*

It further suggested that the trend towards categorization in the U.S. was the result of a need to comply with the requirements of a funding system and therefore the report came down more in favour of an approach which grouped children according to their instructional needs rather than etiological or psychological factors. Hence "learning difficulties" rather than "learning disabilities" became the focus of attention.

Of particular significance was the research which the Committee initiated to determine current standards in basic literacy and numeracy across Australia. This will be dealt with briefly in the next section. As a culmination of its work a number of specific recommendations were made in the areas concerning the incidence of learning difficulties, the adequacy of current measures, adult literacy problems, teacher preparation and research. Among the more significant suggestions were the following:

a) there should be a periodical assessment of national standards in those skills which are relevant and necessary for individuals to cope with problems of everyday living.
b) finance for special education should be mainly through the general funding system for education with the exception of services for the severely handicapped. Later reports of the Schools Commission supported this concept.
c) there should be an expansion of early childhood education facilities together with a greater co-ordination of efforts by the various departments involved in the identification, prevention and treatment of learning difficulties.
d) more support services and training should be provided for the

regular class teacher so that in the long-term there would be less reliance upon specially trained remedial teachers. An emphasis should be placed upon the training of resource or companion teachers to work alongside classroom teachers to assist those children with learning difficulties. Pilot studies should explore the establishment of the resource teacher position.

e) The Australian Universities Commission should examine the possibility of selected universities being responsible for the training of teacher educators, particularly in the field of special education.

f) pilot studies should be initiated to provide information on the effects of the policy of integrating children with handicaps into regular school and class programs.

Thus the scene was set for some exciting advances in the education of children with learning difficulties. The Report epitomized the effects the emerging philosophies were having upon the educational climate and presented serious challenges to those working in this field; to the class teachers, to the administrators; but most importantly, to the teacher educators and researchers whose responsibility it is to imbue teachers with a professional outlook typified by a spirit of scientific enquiry and to impart those competencies they will need to fulfil the expectations and spirit of the times.

EMPIRICAL FACTORS

While the Report has been enthusiastically received in the special education community it has, as indicated earlier, generated little excitement in the general system of education. Nevertheless it has stimulated some very valuable research which, it is hoped, will provide an empirical base upon which effective programs and delivery models will be built. Ultimately, a more caring climate of positive discrimination for disabled learners may be effected throughout the general community.

National Survey

One of the first actions of the Select Parliamentary Committee was the commissioning of the Australian Council for Educational Research to conduct a study of basic reading, number and writing skills of a sample of 10 and 14 year old students across Australia. This was the first

time a study of such magnitude had been conducted in this country, and consequently, specific tasks and competencies associated with the basic skills of literacy and numeracy which children are expected to possess to enable them to participate successfully in both schools and the general society had to be identified and test items constructed. Using a criterion testing, rather than a normative approach, the study then sought to estimate the numbers of children who were failing to attain these basic skills. In addition, relationships between physical, social and psychological factors and the attainment of competence in the basic skills were explored (cf Keeves and Bourke, 1976; Bourke and Lewsis, 1976; Bourke and Keeves, 1977, Australian Studies in School Performance, AASP).

Some of the major findings were:

a) Mastery of Reading

A variety of tests were used, including knowledge of alphabet, picture/sentence test, and a comprehension test that had been used in other English-speaking countries. Performance on these tasks showed considerable variability. It was estimated that 7500 ten year olds and 2000 fourteen year old students across Australia were not able to read simple sentences and select appropriate pictures. In classroom terms that meant that one child per classroom of ten year olds and one child in every three or four classrooms of fourteen year olds was unable to read at an independent level. Comparisons with other countries on a reading comprehension test indicate that Australian children performed as well as those in the U.K., U.S.A. and New Zealand. While this may suggest that there is no cause for undue concern about the average standards of performance in reading in Australian schools, the observation by Keeves et al (1978) that there is a growing criticism of student performance in the U.K. and the United States is relevant.

b) Performance in Writing

There was a similar variability of performance on writing skills within the two age groups. The performance of fourteen year olds on the tasks of formal letter writing is particularly worrying with only 50% being correct on a job application exercise.

c) Mastery of Numeration

It was estimated that four per cent out of approximately 10,000 of the fourteen year olds across Australia would leave school unable to subtract or multiply effectively because they did not know their number facts. For division the incidence would rise to eight per cent. A quarter of this group would also leave school unable to handle basic tasks using the decimal system of notation. Moreover, essential everyday tasks such as estimation and the recording of the time shown on the face of a watch were handled poorly by a large percentage of both the ten and fourteen year olds. It was estimated by teachers that opproximately twenty per cent of the ten year olds and fifteen per cent of the fourteen year olds needed remedial work in number, but they felt less than half were in fact receiving it.

d) Performance on Word Knowledge Tests

This study also used the Word Knowledge Tests which were developed by Thorndike (1973) for the International Association for the Evaluation of Educational Achievement and which were administered in 1970 to ten and fourteen year old students in a wide range of English-speaking countries. In Australia only fourteen year olds were sampled. Thus a comparison of the performance of this age group over the five year period between 1970 and 1975 was able to be made across the states and for Australia as a whole. The results indicated that the overall performance for this age group had declined significantly (5% level) in this period. Tasmania and Western Australia experienced the lowest decline while Victoria and Queensland had the highest. The report of the study was cautious in its interpretation of these results, suggesting that this area should be monitored over a longer period together with an examination of changes in the time spent by children on reading and writing tasks in school and at home.

e) Learning Problem

Information from a teacher questionnaire concerning factors including the presence of learning difficulties, revealed that fifteen to twenty per cent of students in normal schooling were seen at both the ten and fourteen year old levels to be in need of remedial instruction in reading and number.

A General Summary

For a concise overview of the AASP project and a discussion of its policy implications, the reader is strongly recommended to consult Keeves, Matthews

and Bourke (1978). From among a number of their recommendations two very significant suggestions emerge which are somewhat related. First, they make a very good case for an improvement in the level of pre-service teacher training given to primary and lower or secondary teachers in the basic skill subjects, such as reading and number; so that all teachers have a better capacity to handle learning difficulties within the normal classroom setting. A second proposition is that schools and teachers increase the degree of individualization of teaching methods, particularly in the area of mastery of basic skills which should be at the centre of the school's core curriculum. The need for a thorough screening of student's entry skills and a careful monitoring of his performance throughout the instructional process by the regular use of criterion referenced tests was emphasized as a means of ensuring that each child reached mastery level in the objectives set in as an efficient a manner as possible.

Other Research

There has been an increasing interest by various funding bodies, such as The Educational Research and Development Committee, into the area of learning difficulties. Also, state departments of education have become more conscious of the need to have a data base from which to devise more relevant programs. For instance in Victoria an early childhood development study was carried out in 1976 to screen approximately 1000 Grade 2 children with a battery of reading and mathematic tests. In Tasmania the Research Branch of the Education Department has recently evaluated a pilot program to test the effectiveness of support for teachers who had a handicapped child in their regular class. These are two specific examples of the type of research the Select Committee encouraged in its report. At the curriculum level a committee of reading specialists has been working for some time to develop for N.S.W. schools a comprehensive K-Year 12 reading program.

No doubt influenced by the AASP project further surveys of literacy and numeracy have been conducted in N.S.W. (Nay, 1976), A.C.T. (Coates and Donovan, 1979) and Queensland (Jacobson, 1978),where disappointingly too much emphasis has been given to comparisons between state standards or an analysis of whther standards are declining. A more profitable direction for

research may be an analysis of those curriculum and instructional components which work to the advantage of various groups of children. Here one might use a more systemic type of evaluation of school programs somewhat along the lines of a model developed by the writer in evaluating a special school's work experience program (Parmenter, 1978; Parmenter, Searl and Roberts, 1979).

At the federal level the Australian Schools Commission has recently commissioned the Schonell Educational Research Centre of the University of Queensland to conduct a nation-wide survey of special education provisions. This will be the first comprehensive assessment of the extent of these services in Australia and consequently should provide a useful data base for future policy decisions. We are quite fortunate, too, in having The Centre for Educational Research and Innovations (CERI) of the Organization for Economic Co-operation and Development (O.E.C.D.) currently engaged upon a study of the schooling and transition to work of handicapped adolescents.

Macquarie University Special Education Centre

As a direct result of federal government interest in children's learning difficulties the Australian Universities Commission initiated additional research and teacher training facilities in each state at the University level. A significant grant was awarded to Macquarie University where a Special Education Centre was established in 1975. Its on-campus activities include research programs into developmental disabilities, early childhood learning problems (especially language), together with reading and number programs for the elementary level child. While no one model or philosophy of learning is pursued exclusively, there is an emphasis upon a data-based instruction and mastery learning approach in the research programs. Of particular interest are the off-campus activities where University staff work in close harmony with facilities providing direct services in the areas of vocational training, the cerebral palsied, deaf/blind multiply handicapped, developmentally disabled and disadvantaged aborigines. Studies into service delivery systems are also proceeding, particularly mainstreaming and resource teacher models.

Hopefully this work is providing a climate which will stimulate undergraduate and graduate students to approach problems in a spirit of scientific enquiry so they may develop the type of professional leadership the school system needs if it is to tackle effectively the variety of children's learning difficulties. Moreover, the Centre is deeply committed to the translation of research into practice so that the chasm between research

and schools may be bridged.

THE FUTURE

While the Select Committee Report questioned the effectiveness of teacher preparation, there has also been a general criticism of the total school system by politicians, employers and academics; a phenomenon that seems to be world wide. Hence a national enquiry into teacher education is in train together with similar enquiries in at least two of the states. In addition a report of a Committee set up by the federal government to enquire into education and training has just been released (Williams, 1979). Recently other committees have examined the problems young people, including the handicapped, face in making the transition from school to work. Although there are complex reasons why these studies have been conducted; one which stands out is the chronic state of youth unemployment being experienced in Australia and therefore the question of accountability of the school system is being closely scrutinized for the first time. Groups representing children with learning difficulties would do well to make strong representations to ensure that the amount of positive discrimination already won is not lost in the general malaise surrounding job opportunities for youth.

Finally, it is suggested that we take a more ecological approach to the definition, assessment and treatment of learning difficulties. While it is obvious that we ought to pursue the quest for better instructional practices in the basic academic skills, it is also imperative that we examine closely those factors which lead society, including the school system, to accept or reject particular children. By adopting an ecological approach, learning problems would be seen in a broad community context so that a learning disability would no longer be defined merely with reference to deviation from a school model. Furthermore, it is essential that we also examine the aims and objectives of the regular school system, together with the general frame of reference which teachers of regular classes hold concerning instruction and evaluation. If we can then have some impact upon these factors, so that a greater degree of heterogeneity of pupil characteristics becomes acceptable, the welfare of those with learning difficulties/disabilities should be enhanced.

Summary

This paper has examined the development of services in Australia for children with learning difficulties/disabilities under the headings of historical, philosophical and empirical factors, which have influenced their development. The basic theme of the discussion has been the need to provide a firm research base upon which delivery models may be built, instructional practices may be implemented and teacher training courses may be established so that the level of professionalism of people working in this area will be raised to the advantage of those children needing our support.

REFERENCES

BOURKE, S.F. and LEWIS, R. Literacy and Numeracy in Australian Schools: Item Report. Australian Studies in School Performance Volume II. Canberra: Australian Government Publishing Service, 1976.

BOURKE, S.F. and KEEVES, J.P. (Eds) The Mastery of Literacy and Numeracy. Final Report. Australian Studies in School Performance Volume III. Canberra: Australian Government Publishing Service, 1977.

CADMAN, A. (Chairman) Learning Difficulties in Children and Adults. Report of the House of Representatives Select Committee on Specific Learning Difficulties. Canberra: Australian Government Publishing Service, 1976.

COATES, J.R. and DONOVAN, W.F. The Literacy and Numeracy of ACT Children. Paper presented at 49th ANZAAS Congress, Auckland, New Zealand, 1979.

KARMEL, P. (Chairman) Schools in Australia: Report of the Interim Committee for Australian Schools Commission. Canberra: Australian Government Publishing Service, 1973.

JACOBSON, J. A Survey of the Research into Reading Standards of Queensland Grade Five Pupils, 1933-77. Brisbane: Queensland Institute for Education Research.

KEEVES, J.P. and BOURKE, S.F. Literacy and Numeracy in Australian Schools: A First Report. Australian Studies in School Performance Volume I. Canberra: Australian Government Publishing Service, 1976.

KEEVES, J.P., MATTHEWS, J.K. and BOURKE, S.F. Educating for Literacy and Numeracy in Australian Schools. Melbourne: A.C.E.R., 1978.

NAY, W. (Chairman) Enquiry into Literacy and Numeracy. Sydney: New South Wales Department of Education, 1976.

PARMENTER, T.R. A Model for the Evaluation of Vocational Preparation Program for the Learning Disabled. Paper presented at the Association for Children with Learning Disabilities Annual Conference, Sydney, 1978.

PARMENTER, T.R., SEARL, G. and ROBERTS, G. A Systems Approach to the Evaluation of a Work Experience Program. Paper presented at ANZAAS Congress, Auckland, New Zealand, 1979.

THORNDIKE, R.L. Reading Comprehension Education in Fifteen Countries. New York: Wiley, 1973.

WARD, J., PARMENTER, T.R., RICHES, V. and HAURITZ, M. A Study of the Attitudes of N.S.W. School Principals Toward the Educational and Pre-vocational Provisions for the Mildly Intellectually Handicapped. Paper presented at the Third Annual Conference of the Australian Association of Special Education, Sydney, 1978.

WATTS, B., ELKINS, J., HENRY, M.B., ALPERT, W.C., ATKINSON, A.K. and COCHRANE, K.J. The Education of Mildly Intellectually Handicapped Children: Philosophies, Practices and Outcomes. Canberra: Australian Government Publishing Service, 1978.

WILLIAMS, B. (Chairman) Education Training and Employment. Report of the Committee of Inquiry into Education and Training. Canberra: Australian Government Publishing Service, 1979.